IN THE SPECIFICATION

Following the title, please insert the new paragraph on a new line:

BACKGROUND

Please amend the first full paragraph of page 1 as follows:

The invention relates to a method for controlling the lean operation of an internal combustion engine, especially an internal combustion engine of a motor vehicle, provided with a nitrogen oxide storage catalyst ~~as claimed in the preamble of claim 1~~.

Insert the following new paragraph on a new line, before the first full paragraph on page 5:

SUMMARY OF THE INVENTION

Please delete the second full paragraph of page 5.

Paragraph bridging pages 5 and 6:

~~As claimed in claim 1, in~~ In a first process step, to establish the instant of switching from the storage phase to the discharge phase, a switching operating point is determined at least from the integral value of the nitrogen oxide mass flow upstream and/or downstream of the storage catalyst. This respective switching operating point is compared in a second process step to a definable operating field which is optimized especially with respect to the fuel savings potential as a function of the load acceptance of the internal combustion engine, which is formed by a plurality of individual operating points for one new and one aged storage catalyst. For a switching operating point which is located within the operating field, the engine control enables lean operation and thus switching between the storage phase and the discharge phase of the nitrogen oxide storage catalyst, while the engine control conversely dictates lambda operation of the internal combustion engine at which lambda is equal to 1 for a switching operating point which departs from the operating field.

Paragraph bridging pages 7, 8 and 9:

~~As claimed in claim 3, to~~ To establish the switching instant from the storage phase to the discharge phase, a relative nitrogen oxide slip as the difference between the nitrogen oxide mass flow which has flowed into the nitrogen oxide storage catalyst and the nitrogen oxide mass flow which has flowed out of the nitrogen oxide storage catalyst can be determined relative to the storage time, the quotient of the integral values of the nitrogen oxide mass flow upstream and downstream of the nitrogen oxide storage catalyst moreover being brought into a relative relationship with a definable degree of nitrogen oxide conversion which has been derived from the exhaust boundary value, so that when this given switching condition is present in the case of a switching operating point which is within the operating field, switching from the storage phase (lean operation) to the discharge phase (rich operation) is carried out at the switching instant which has been optimized with respect to fuel consumption and the storage potential. Advantageously, as the reference quantity for switching here the focus is thus on the time integrals of the amount of nitrogen oxide which are brought into a relative relationship to one another upstream and downstream of the nitrogen oxide storage catalyst in conjunction with a definable degree of conversion. That is, in this discharge strategy the tail pipe emissions with respect to nitrogen oxide are largely independent of the ageing state of the catalyst and furthermore the exhaust result is also largely independent of the number of discharges per unit of time. With this operating mode, advantageously the storage capacity which is present in the catalyst can be fully used; this is reflected in a new or newer catalyst in fuel consumption which is reduced compared to the aged storage catalyst, since the new or newer catalyst need be discharged less often than an aged catalyst since the relative slip at which discharge is to be carried out is reached only at a later instant than is the case for an aged storage catalyst. For an aged storage catalyst in the operating mode in conjunction with the relative slip, only the number of discharges rises, however their being largely independent of the exhaust result as such. This is due to the fact that with this operating mode discharge would always take place only when this becomes necessary in order not to exceed the given exhaust boundary value per unit of time, since the integrated nitrogen oxide mass flows upstream and downstream of the nitrogen oxide storage catalyst are referenced here to the degree of conversion which is necessary for adherence

to the exhaust boundary value. In contrast to the operating mode as in the state of the art, due to the use of the full storage potential a new storage catalyst need be discharged less often viewed over a specific time interval than is the case for a new storage catalyst specified in the state of the art, in which the storage potential of a new storage catalyst cannot be fully used. This is due to the fact that in the operating mode according to the state of the art the absolute nitrogen oxide slip amount which has been defined per discharge as a fixed value applies both to the old and also the new storage catalyst so that the new storage catalyst in the state of the art must always also carry out discharge when this absolute nitrogen oxide slip which is determined beforehand is reached, although the new nitrogen oxide storage catalyst could store still more nitrogen oxides. In contrast, in the approach by the relative relationship the entire instantaneous storage potential is always used, so major fuel savings are achieved that compared to the operating mode in the state of the art especially with regard to a new or newer storage catalyst. This is due to the fact that in the operating mode according to the state of the art, since for a new or newer storage catalyst discharge is initiated earlier than necessary, a rich mixture is also added earlier than necessary.

Page 11, first full paragraph:

Preferably, the storage catalyst capacity field relative to the temperature window ~~as claimed in claim 7~~ is limited on the one hand by the boundary line for a new storage catalyst and on the other hand by the boundary line for an aged storage catalyst which constitutes a boundary ageing state. That is to say, the area of the storage catalyst capacity field which lies between these two boundary curves constitutes a measure of catalyst ageing. The boundary line for an aged storage catalyst which constitutes the boundary ageing stage can be chosen depending on the individual requirements, i.e., for example depending on the given, still tolerable increased fuel consumption in conjunction with an aged storage catalyst and/or a given storage catalyst service life. Especially preferably, the temperature window ~~as claimed in claim 8~~ comprises temperature values between approximately 200°C and approximately 450°C, for example the optimum operating point being in the range from 280°C to 320°C.

Page 11, second full paragraph:

~~As claimed in claim 9, a~~ A process is especially preferable in which, in the event of a failure to reach the minimum nitrogen oxide storage capacity, an error signal is set in the engine control device so that for example the nitrogen oxide storage catalyst can be replaced in order to be able to continue to operate the internal combustion engine with low fuel consumption.

Paragraph bridging pages 11 and 12:

~~As claimed in claim 10, the~~ The nitrogen oxide mass flow upstream of the nitrogen oxide storage catalyst is modeled. As a rule however this nitrogen oxide mass flow upstream of the nitrogen oxide storage catalyst could also be measured, for example by means of a nitrogen oxide sensor. This nitrogen oxide sensor ~~as claimed in claim 11~~ is however advantageously provided downstream of the nitrogen oxide storage catalyst in order to measure the nitrogen oxide mass flow downstream of the nitrogen oxide storage catalyst. Especially for the times in which the nitrogen oxide sensor is not ready for operation, the nitrogen oxide mass flow downstream of the nitrogen oxide storage catalyst can also be modeled. Modeling is defined as the raw nitrogen oxide mass flow upstream of the nitrogen oxide storage catalyst and the nitrogen oxide mass flow downstream of the nitrogen oxide storage catalyst being taken from the nitrogen oxide storage model and the raw nitrogen oxide emission model. In the models for example the raw nitrogen oxide mass flow is modeled from the parameters which describe the operating point of the internal combustion engine, for example, the supplied fuel mass or air mass, the torque, etc.. Likewise, the modeled nitrogen oxide raw mass flow can however also be taken from a characteristic or family of characteristics.

Please insert the following paragraph on a new line before the first full paragraph of page 12:

BRIEF DESCRIPTION OF THE DRAWINGS

Please insert the following paragraph on a new line before the last paragraph on page 13:

DETAILED DESCRIPTION OF THE INVENTION